

## CLAIMS

1. A conductive paste comprising: conductive particles comprising primary particles and agglomerate of primary particles, which are 0.5 to 20  $\mu\text{m}$  in average particle diameter and 0.07 to 1.7  $\text{m}^2/\text{g}$  in specific surface area, and a binder based on  
5 thermosetting resin.
2. A conductive paste comprising: conductive particles of 0.5 to 20  $\mu\text{m}$  in average particle diameter and 0.07 to 1.7  $\text{m}^2/\text{g}$  in specific surface area, having at least two peaks of particle size distribution, and a binder based on thermosetting resin.
3. A conductive paste comprising: conductive particles formed by mixing conductive particles of at least two different particle size distributions, and a binder based on thermosetting resin.
4. The conductive paste of claim 1, wherein the agglomeration degree of the agglomerate (agglomeration degree = agglomerate average particle diameter/primary particle average diameter) is within a range from 1.05 to 3.90.
5. The conductive paste of claim 1, wherein the primary particle is spherical, and the agglomerate is formed of at least two of the primary particles agglomerated.
6. The conductive paste of claim 1, wherein the agglomerate has been disaggregated.
7. The conductive paste of any one of claim 1 to claim 3, wherein the content of the conductive particles ranges from 30 to 70 vol%, and the content of the binder ranges from 70 to 30 vol%.
8. The conductive paste of any one of claim 1 to claim 3, wherein the content of volatile matter as against the total weight is 4.0 wt% or less.
9. The conductive paste of any one of claim 1 to claim 3, wherein the

adsorption water concentration of the conductive particles is 1000 ppm or less.

10. The conductive paste of any one of claim 1 to claim 3, wherein the surface oxygen concentration of the conductive particles is 1.0 wt% or less.

11. The conductive paste of any one of claim 1 to claim 3, wherein the binder  
5 comprises dimeric acid diglycysile ester epoxy resin and amine adduct hardener.

12. The conductive paste of any one of claim 1 to claim 3, wherein the binder is selected from the group consisting of glycysile ether epoxy resin such as bisphenol F epoxy resin, bisphenol A epoxy resin, and bisphenol AD epoxy resin, alicyclic epoxy resin, glycysile amine epoxy resin, and glycysile ester epoxy resin.

13. The conductive paste of any one of claim 1 to claim 3, wherein the conductive particles are one kind of particles at least selected from the group consisting of gold, platinum, silver, palladium, copper, nickel, tin, lead, and indium.

14. The conductive paste of any one of claim 1 to claim 3, wherein the conductive particles are alloy particles of a combination selected from the group consisting of gold, platinum, silver, palladium, copper, nickel, tin, lead, indium, zinc, chrome, and bismuth.

15. The conductive paste of any one of claim 1 to claim 3, wherein the conductive particles are particles coated with at least one kind of metal selected from the group consisting of gold, platinum, silver, palladium, copper, nickel, tin, lead, indium, zinc, and chrome, having a metal, inorganic matter or organic particle as a core.

16. The conductive paste of any one of claim 1 to claim 3, wherein the conductive particles are particles coated with alloy of a combination selected from the group consisting of gold, platinum, silver, palladium, copper, nickel, tin, lead, indium, zinc, chrome, and bismuth, having a metal, inorganic matter or organic

particle as a core.

17. A conductive paste manufacturing method comprising the steps of: preparing conductive particles, measuring agglomeration degrees of the conductive particles (agglomeration degree = agglomerate average diameter/primary particle average diameter), disaggregating the conductive particles according to the  
5 measured result of agglomeration degree, and adding a binder thereto and kneading.

18. A conductive paste manufacturing method comprising the steps of: preparing conductive particles having at least two peaks of particle size distribution, and adding a binder thereto and kneading.

19. A conductive paste manufacturing method comprising the steps of: preparing conductive particles of at least two different particle size distributions, mixing them, and adding a binder thereto and kneading.

20. The conductive paste manufacturing method of any one of claim 17 to claim 19, wherein the step of preparing conductive particles is a step of drying copper powder deposited by a wet chemical reduction process.

21. The conductive paste manufacturing method of claim 17, wherein the step of disaggregating the conductive particles according to the measured result of agglomeration degree is a disaggregation step executed when the measured result of agglomeration exceeds 3.90.

22. The conductive paste manufacturing method of claim 17, wherein the disaggregation step is executed by directly applying a jet stream to the agglomerate.

23. The conductive paste manufacturing method of claim 17, wherein the disaggregating step is executed by putting the agglomerate into a centrifugal rotation device and rotating the centrifugal rotation device.

24. The conductive paste manufacturing method of claim 17, wherein the

agglomeration degree of conductive particles after disaggregation is within a range from 1.05 to 3.90.

25. A circuit board manufacturing method that is a method of measuring conductive particles including primary particles and agglomerate of primary particles, comprising the steps of obtaining the average diameter of primary particles, obtaining the average diameter of agglomerate, and as agglomeration degree, dividing the average particle diameter of agglomerate by the average particle diameter of primary particles.

26. The conductive paste manufacturing method of claim 25, wherein the step of obtaining average particle diameter of primary particles is a step of image analysis of observed images of conductive particles, and the step of obtaining the average particle diameter of agglomerate is a step of measuring conductive particles by using a laser diffraction scattering type particle size distribution measuring instrument.

27. The conductive paste manufacturing method of claim 26, wherein the image observation of conductive particles is executed by using SEM (scanning electron microscope), CCD camera, or optical microscope.

28. A circuit forming board comprising an insulating board, a plurality of wiring patterns formed on the insulating board, and via-hole conductor electrically connecting the wiring patterns, wherein the conductive paste of any one of claim 1 to claim 3 is used as the via-hole conductor.

29. A circuit board manufacturing method comprising at least the steps of: affixing releasing film formed with a releasing layer on at least one side thereof to one or both surfaces of an insulating board, making a through-hole for forming via-hole conductor in the insulating board provided with the releasing film, filling the

conductive paste of claim 1 into the through-hole, and removing the releasing film.